

Report: Shipments of Microturbines Fall Short of Robust Forecasts

Modest 15% increase in shipments fails to meet industry expectations

Boulder, Colo., April 10, 2002 -- Shipments of microturbines grew 15% in 2001 to approximately 1,400 units, according to a new study by Primen.

Despite the increase, the shipments to distributors were far below beginning-of-the-year forecasts by manufacturers and industry analysts. These projections called for shipments to reach 3,500 to 5,500 units in 2001, a growth rate that would have matched the previous year's 400% increase.

"The optimistic forecasts were influenced by the enormous uncertainty in energy markets at the time," said Primen's Nick Lenssen, director of the study. "Recall the highly visible chaos of the California energy crisis in 2000 and early 2001. Electricity prices were reaching record highs, and rolling blackouts had called attention to the acute shortages of power in the state. It was reasonable to assume that the crisis would continue through 2001 and thereby lead to a heightened interest in stand-alone power generation. However, California's energy crisis seemed to suddenly disappear. Furthermore, the U.S. economy slipped into a recession, which resulted in reduced capital spending."

Primen's research saw market realities coming into focus in the third quarter. It was clear then that some units shipped by manufacturers to distributors weren't selling. In early August, Capstone Turbine Corp., which accounts for roughly 90% of the market, issued a warning that its third-quarter shipments would fall substantially below projections. A few weeks later, Honeywell Power Systems, then the number-two microturbine manufacturer, announced plans to halt operations and buy back all its units in the field.

Even with the uncertainties brought about by the California energy crisis, microturbine forecasts failed to consider other important barriers to market acceptance. These included higher-than-projected natural gas prices, which made the technology uncompetitive with grid-supplied power, and technical problems that continued to bedevil some developers and vendors.

What lies ahead for the microturbine industry? "Given the market realities, we see manufacturers retreating from expectations of mass-market applications in which microturbines competed head-to-head with the traditional power grid," Lenssen said. "That scenario now appears unlikely. Instead, manufacturers will need to work on developing advanced technologies that will fill market niches."

Government purchases will also be important to near-term growth in the microturbine industry, the study concludes. For example, in November 2001, Capstone received a \$3.7 million firm order from the Los Angeles-area South Coast Air Quality Management District, which Primen estimates will lead to purchases of at least 60 microturbines. Elsewhere, the California Consumer Power and Conservation Financing Authority will decide in 2002 whether microturbines will be included in its bulk purchases of combined heat and power systems. Internationally, policy initiatives pending in Germany, the United Kingdom, and elsewhere could also lead to higher microturbine sales.

The Primen report features an analysis of the "next wave of microturbine commercialization." This includes an in-depth look at industry leader, Capstone, as well as other players: Ingersoll-Rand Energy Services; Turbec AB; Bowman Power Systems; Elliott Energy Systems; ALM Turbine Inc.; and DTE Energy Technologies. Also discussed are two industry casualties, Honeywell Power Systems and Solo Energy Corp. The study also notes the activities of Japanese companies, which continue to invest in and develop microturbine-related equipment and businesses.

The full "Primen Perspective" report is available on Primen's website at:
<http://my.primen.com/Promotions/Downloads/MicroturbinesRedux.asp> (registration required).

More information on Primen's research on distributed energy can also be obtained by contacting Primen at tel 877.976.4681 or by email at ask@primen.com.

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